MOTION FILED

SEP 24 1975

No. 74-1270

IN THE SUPREME COURT OF THE UNITED STATES

October Term, 1975

Russell Train, Administrator of the Environmental Protection Agency, et. al., Petitioners

v.

Colorado Public Interest Research Group, Inc., et. al., Respondents

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

BRIEF AMICUS CURIAE OF PROFESSOR MICHAEL S. BARAM, DR. ERIC PETRASKE, AND THE BOSTON UNIVERSITY ENVIRONMENTAL LAW SOCIETY.

No. 74-1270

IN THE SUPREME COURT OF THE UNITED STATES

October Term, 1975

Russell Train, Administrator of the Environmental Protection Agency, et. al., Petitioners

vs.

Colorado Public Interest Research Group, Inc., et. al., Respondents

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

MOTION FOR LEAVE TO FILE BRIEF AMICUS CURIAE

No. 74-1270

IN THE SUPREME COURT OF THE UNITED STATES

October Term, 1975

Russell Train, Administrator of the Environmental Protection Agency, et. al., Petitioners

v.

Colorado Public Interest Research Group, Inc., et. al., Respondents

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

BRIEF AMICUS CURIAE OF PROFESSOR MICHAEL S. BARAM, DR. ERIC PETRASKE, AND THE BOSTON UNIVERSITY ENVIRONMENTAL LAW SOCIETY

INDEX

Interest of the Amicus 1

Summary of Argument 4

Argument:

I. AUTHORITY TO SET STANDARDS FOR THE CONCENTRATION OF RADIOACTIVE MATERIALS IN THE GENERAL ENVIRONMENT WAS TRANSFERRED FROM THE AEC TO THE EPA IN 1970, AND THIS TRANSFER PROVIDES EPA WITH THE AUTHORITY TO DETERMINE EFFLUENT DISCHARGE LIMITATIONS FOR THE SOURCES OF RADIOACTIVE MATERIALS IN THE GENERAL ENVIRONMENT, WHICH SOURCES INCLUDE NRC LICENSEES 10

II. EPA AUTHORITY TO DETERMINE EFFLUENT DISCHARGE LIMITATIONS FOR THE SOURCES OF RADIOACTIVE MATERIALS IN THE GENERAL ENVIRONMENT, INCLUDING NRC LICENSEES, IS CONSISTENT WITH THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, AND WITH THE FEDERAL PREEMPTION OF STATE REGULATION OF RADIOACTIVE EFFLUENT DISCHARGES FROM NUCLEAR POWER FACILITIES 18

Conclusion 25

CITATIONS

Cases:

Northern States Power Co. v. Minnesota, 447 F. 2d 1143, affirmed, 405 U.S. 1035 6,24

Statutes, executive orders, and regulations:

Atomic Energy Act of 1954, 68 Stat. 919 et. seq. as amended, 42 U.S.C. 2011 et. seq.

42 U.S.C. 2021(b) 23

Clean Air Act Amendment of 1970, 84 Stat. 1676, 42 U.S.C. 1857

42 U.S.C. 1857 c-5 23

42 U.S.C. 1857 c-5 (a)(2)(E) 1970 16

Energy Reorganization Act of 1974, Pub. L. 93-438 88 Stat. 1233-1254 9

Federal Water Pollution Control Act, 62 Stat. 1155, as amended by the Federal Water Pollution Control Act Amendment of 1972, 86 Stat. 816, et. seq., 33 U.S.C. (Supp. III) 1251 et. seq.:

Sec. 101(a)(1), 1251(a)(1) 19

Sec. 101(a)(2), 1251(a)(2) 19

Sec. 301, 1311 19

Sec. 301(b)(1)(c), 1311(b)(1)(c) 1972 16

Sec. 303, 1313 19

Sec. 304(b)(1)(B), 1314(b)(1)(B) 20,23

Sec. 304(b)(2)(B), 1314(b)(2)(B) 20,23

Sec. 306(a)(1), 1316(a)(1) 18,20,23

Sec. 306(b), 1316(b) 7,18,20,21

Sec. 307, 1317 21

Sec. 401, 1341 23

Sec. 402, 1342 20

Sec. 404, 1344 17

Sec. 502(6), 1362(6) 7,18,21

49 U.S.C. 1431 17

Reorganization Plan No. 3 of 170, 84 Stat,
2086 35. seq., 5 U.S.C. App., pp. 609
et. seq. 5,6,10

Sec. 2(b), 84 Stat. 2088, 5. U.S.C,
App., p. 610 11

Code of Federal Regulations:

Title 10.

Sec. 50.34a(a) 27

Congressional Material:

119 Cong. Rec. H-11749 - H-11750 (daily ed.,
December 19, 1973 12

Miscellaneous:

36 Fed. Reg. 11113 13

40 Fed. Reg. 19439 13,24

40 Fed. Reg. 23420 13,24

INTEREST OF THE AMICUS

This brief amicus is presented on behalf of Michael S. Baram, Eric W. Petraske, and the Environmental Law Society of Boston University School of Law, who have substantial personal interests in environmental health and the protection of the environment.

Michael S. Baram, attorney for the Environmental Law Society, is an Associate Professor at the Massachusetts Institute of Technology. He is Vice Chairman of the American Bar Association's Committee on Environmental Law (General Practice Section), Chairman of the American Bar Association's Committee on Technology Assessment, member of two committees of the National Academy of Sciences (including the Committee on Biological Effects of Ionizing Radiation), and special advisor to a Committee of the National Academy of Engineering. He is a Lecturer in Law at Boston University School of Law, and counsel

to the law firm of Bracken and Selig.

The Environmental Law Society of Boston University School of Law is an organization of students with expertise in environmental regulation and energy programs. Dr. Eric Petraske, a member, holds a doctorate in nuclear physics, has held post-doctoral and faculty appointments in this field, and is now a third-year law student at Boston University School of Law. He has worked closely with Professor Baram on various studies relating to nuclear power.

Messrs. Baram and Petraske have conducted substantial research on standard-setting and other aspects of regulating ionizing radiation from nuclear power sources. They have developed expertise on the several regulatory approaches employed to control ionizing radiation; on the authority of the Nuclear Regulatory Commission (NRC), the Environmental Protection Agency (EPA),

and the States; and on the analytical methods employed by these authorities for standard-setting and other decision-making.

This expert knowledge has enabled them and the Boston University Environmental Law Society to become aware of serious deficiencies in the discussion of this case as it has progressed through the lower courts. Therefore, this brief has a single purpose: to focus on these specific defects and to bring necessary analysis to the attention of the Court. The results of this analysis support the Respondent's position in this case.

At stake in this case are: (1) important public interests in environmental health and the quality of ecosystems, for present and future generations; (2) the allocation of regulatory authority suitable to the nature of the radiation control problem and in harmony with the

legislative framework provided by Congress; and (3) development of appropriate government regulations for the optimal use of nuclear power.

SUMMARY OF ARGUMENT

Petitioners argue that the combination of legislative history and existing regulation of radioactive effluent discharges from nuclear power plants is sufficient to sustain the present regulatory practices of the Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency (EPA). Present regulatory practices have in essence created an exception to the Federal Water Pollution Control Act (FWPCA) for the regulation of radioactive effluent discharges from nuclear power plants. Under the exception, NRC determines limitations on such discharges and incorporates such limitations in the conditions it imposes on its licensees.

Petitioners' argument fails to address (a) the scope of current EPA regulatory authority and its implications for NRC regulation of licensee discharges; and (b) the relationship between standards or limitations for radioactive materials in the general environment as promulgated by EPA, and discharge limitations imposed on nuclear power plant licensees by the NRC.

The central argument of this brief amicus curiae is: (1) that Reorganization Plan No. 3 of 1970, (5 U.S.C. App., p. 609 et seq.), transferred to EPA the authority to set standards for the protection of the general environment and the individuals therein from ionizing radiation; (2) that this EPA authority necessarily requires EPA to determine the limitations to be imposed on the sources of radioactive effluent discharge into the general environment; (3) that EPA determination of discharge limitations to be imposed on the sources of radio-

active effluent discharges is consistent with and supported by the provisions of the Federal Water Pollution Control Act Amendments of 1972, (33 U.S.C. (Supp. III) 1251 et seq.),for the case of nuclear facilities licensed by the NRC; and finally, (4) that this shift of regulatory authority is consistent with the doctrine of federal preemption as it has been enunciated for the regulation of radioactive effluent discharges from nuclear power facilities in Northern States Power Co. v. Minnesota, 447 F. 2d 1143, (C.A. 8), aff'd, 405 U.S. 1035.

Reorganization Plan No. 3 of 1970 (84 Stat. 2086 et seq., 5 U.S.C. App., pp. 609 et seq.) provides EPA with the sole authority to set general environmental standards and thereby the authority to determine discharge levels for the radioactive effluent from nuclear power plants; and the Federal Water Pollution Control Act

Amendments of 1972 (FWPCA) provide EPA with discharge limitation, permit and enforcement authority over point sources of pollutants. The FWPCA defines "pollutant" to include "... radioactive materials ... discharged into water" (Sec. 502 (6) 33 U.S.C. (Supp. III) 1362), without qualification. The FWPCA further prescribes that national "standards of performance", defined as standards "... for the control of the discharge of pollutants ..." shall be established by EPA for various point sources, and includes "steam electric power plants" (33 U.S.C. (Supp. III) 1316 (b)) in its list of point sources. The FWPCA is therefore consistent with the Reorganization Plan; and provides EPA with explicit procedures for setting discharge levels for radioactive effluents, for applying the discharge limitations to specific nuclear facilities through a permit program,

and for enforcing the permit conditions in keeping with a specific timetable for implementing discharge control technologies.

Since the FWPCA does not explicitly amend the Atomic Energy Act of 1954 and subsequent amendments, and since EPA must produce a federal regulatory program for the control of radioactive effluent discharges which reconciles the two acts, federal preemption is not an issue at this time. EPA's subsequent development of such regulatory program may or may not raise the federal preemption issue, as the FWPCA affords EPA several options for implementing a discharge control program applicable to radioactive materials, some of which options would not neccessarily raise a federal preemption issue nor obstruct the further development of nuclear power. Accordingly, we urge the Court to defer further consideration of federal preemption until an

appropriate case is presented, subsequent to the promulgation of such EPA regulatory program.

Finally, we argue that Respondents' position is consistent with the several environmental statutes that concentrate regulatory authority over both general environmental levels of pollutants and related discharge levels from sources of the pollutants in EPA; and that such concentration of authority in EPA is consistent with efficient administration, and with the continued development of nuclear power sources under the authority of the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974. 88 Stat. 1233-1254.

ARGUMENT

I. AUTHORITY TO SET STANDARDS FOR THE CONCENTRATION OF RADIOACTIVE MATERIALS IN THE GENERAL ENVIRONMENT WAS TRANSFERRED FROM THE AEC TO THE EPA IN 1970, AND THIS TRANSFER PROVIDES EPA WITH THE AUTHORITY TO DETERMINE EFFLUENT DISCHARGE LIMITATIONS FOR THE SOURCES OF RADIOACTIVE MATERIALS IN THE GENERAL ENVIRONMENT, WHICH SOURCES INCLUDE NRC LICENSEES.

Reorganization Plan No. 3 of 1970, (5 U.S.C. App., p. 609 et seq.), was promulgated to establish the Environmental Protection Agency, and to concentrate in this new agency various functions for protecting the environment which had been fragmented among other federal agencies. The Reorganization Plan provides, in part:

> "Sec. 2 (a) There are hereby transferred to the Administrator:
>
> ...
>
> (6) The functions of the AEC under the AEC Act of 1954, as amended, administered through its Division of Radiation Protection Standards, to the extent that such functions of the Commission consist of establishing generally applicable environmental standards for the protection of the general environment from radioactive material. As used herein, standards mean limits on radiation exposures or levels, or concentrations or quantities of radioactive material, in the general environment outside the boundaries of locations under the control of persons possessing or using radioactive material."
> (5 U.S.C. App., p. 610)

EPA has done little with this authority since 1970, and in 1973, it was advised by the Director of the Office of Management and Budget to confine its radiation regulation to the general environment. In a memorandum from the Director of the Office of Management and Budget, Roy L. Ash, to the EPA Administrator, Russell Train, dated December 7, 1973, the following directive was contained and accepted by EPA:

> "...this memorandum is to advise you that the decision is that the AEC should proceed with its plans for issuing uranium fuel cycle standards, taking into account the comments received from all sources, including EPA: that EPA should discontinue its preparations for issuing, now or in the future, any standards for types of facilities; and that EPA should continue, under its current authority, to have responsibility for setting standards for the total amount of radiation in the general environment from all facilities combined in the uranium fuel cycle, i.e. an ambient standard which would have to reflect AEC's findings as to the practicability of emission controls..." (attached to court of appeals brief of Arkansas et. al., pp. 35-36. Accord, 119 Cong. Rec. H11749-H11750) (daily ed. December 19, 1973)

EPA has followed this interpretation of its functions, and in 1975, proposed regulations for limiting the levels of radioactivity in the general environment, and for limiting human, non-occupational exposures. Environmental Protection Agency, "Proposed Standards: Radiation Protection for Nuclear Power Operations,"

40 Fed. Reg. 23420 (May 29, 1975) .

The NRC has, since 1970, continued to independently promulgate "guidances" for limiting such radioactive effluents from nuclear power facilities. Such discharge limitations were in "interim" form for four and one-half years, as AEC "Proposed" Appendix I. 36 Fed. Reg. 11113 (June 9, 1971). Final Appendix I has been proposed on May 5, 1975 by NRC. (40 Fed. Reg. 19439). Such guidances have essentially served as discharge control regulations on NRC licensees, and have been used to restrict radioactive discharges since 1970. The NRC has employed cost-benefit analysis and the "As Low As Is Readily Achievable" principle (previously, "As Low As Practicable") in determining the numerical discharge limitations contained in the guidances, but has not employed EPA general environmental standards as a framework for setting its dis-

charge limitations, since such standards have not been available, and are only now in proposed form. 40 Fed. Reg. 23420, (May 29, 1975).

There is a necessary relationship between discharge levels and general environmental levels. In order to achieve and maintain general environmental levels, including levels of human, non-occupational exposure, appropriate discharge levels for each source have to be established. Since general environmental features differ in different regions (e.g. coastal regions, high-altitude regions, etc.); since the number of operating sources of radioactive discharges in each region changes over time; and since monitoring of actual concentrations may indicate that prior theoretical calculations as to future concentrations were invalid; the discharge levels for each facility in a region have

to be determined before operation and then reviewed and altered on the basis of operating experience and monitoring, as necessary to ensure that the general environmental levels will be met and maintained.

Therefore, discharge levels for each facility operating in a region logically have to be established and continually reviewed in light of these other circumstances, to ensure that general environmental standards will be achieved and maintained. However, the NRC has promulgated only generic discharge limitations in Appendix I applicable to all licensees, irrespective of these other circumstances.

Since the legislative history on control responsibility for radioactive effluent discharges from nuclear power plants, as presented by the parties in this case, is inconclusive as to Congressional intent, the central issue before this Court is the appropriate allocation of authority between the two agencies, consistent

with the scope of authority provided by Congress.

It is clear that general environmental standards govern discharge standards under existing legislation for air pollution (42 U.S.C. 1857 c-5(a)(2)(E)1970) and water pollution (33 U.S.C. (Supp. III) 1311(b)(1)(c)1972) control. Therefore, EPA's primacy on radiation regulation matters is evident, although unsupported by its activities to date. This primacy can only be effectively realized through EPA regulation of discharges as well as of general environmental levels, the Respondent's position. Interagency agreement can, of course, be reached to ensure that NRC expertise is available for EPA use in determining discharge limitations on a facility-specific basis.

In determining the appropriate allocation of authority between the two agencies, the Court should be guided by consistent Congressional determination that authority for both discharge and general environmental (ambient) controls should be concentrated in EPA for pollution control purposes. Congress has provided for few exceptions to this single-agency approach to pollution control, and only by means of explicit and detailed provisions in its major pollution control enactments: e.g. (1) aircraft noise emission (discharge) control by the Federal Aviation Administration (49 U.S.C. 1431), general (ambient) noise level control by state and local authorities; (2) dredge spoil disposal by EPA and the Corps of Engineers in a cooperative regulatory program (33 U.S.C. (Supp. III) 1344).

II. EPA AUTHORITY TO DETERMINE EFFLUENT DISCHARGE LIMITATIONS FOR THE SOURCES OF RADIOACTIVE MATERIALS IN THE GENERAL ENVIRONMENT, INCLUDING NRC LICENSEES, IS CONSISTENT WITH THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, AND WITH THE FEDERAL PREEMPTION OF STATE REGULATION OF RADIOACTIVE EFFLUENT DISCHARGES FROM NUCLEAR POWER FACILITIES.

The Federal Water Pollution Control Act Amendments of 1972 (FWPCA) provide EPA with discharge limitation, permit and enforcement authority over point sources of pollutants. The FWPCA defines "pollutant" as including "... radioactive materials ...discharged into water," (Sec. 502(6), 33 U.S.C. (Supp. III) 1362) without qualification. The FWPCA further prescribes that national "standards of performance," defined as standards "...for the control of the discharge of pollutants..." (33 U.S.C. (Supp. III) 1316(a)(1)) shall be established by EPA for various point sources, and includes "steam electric powerplants" (33 U.S.C. (Supp. III) 1316(b)) in its list of point sources.

The provisions of the FWPCA most relevant to EPA determination and application of discharge limitations on the radioactive effluents of nuclear power plants include the following:

1. Water quality standards to be established by the states subject to EPA approval, (33 U.S.C. (Supp. III) 1313) and subject to the overall objectives of the act to have (a) water quality on a national scale sufficient to protect fish, shellfish, wildlife and recreation by 1983 (33 U.S.C. (Supp. III) 1251(a)(2)); and (b) water quality on a national scale undisturbed by polluting discharges from point-sources by 1985. 33 U.S.C (Supp. III) 1251(a)(1).

2. Effluent limitations for existing point sources (33 U.S.C. (Supp. III) 1311) (discharge standards) to be developed by EPA as necessary to achieve and maintain the relevant water quality standards and 1983 and 1985 goals, noted above. Implementation of such limitations is to be accomplished through the National Pollution Discharge Elimination System (NPDES), wherein

discharge permits must be secured by the polluter and enforced by EPA and the states. (33 U.S.C. (Supp. III) 1342). Further, the NPDES program and the conditions of the permits must be based on Congressionally-prescribed criteria: by 1977, employment of the "best practicable control technology" (BPT) for each of the industrial categories of dischargers; (33 U.S.C. (Supp. III) 1314(b)(1)(B)) by 1983, employment of the "best available control technology" (BAT). (33 U.S.C. 1314(b)(2)(B)). An industrial point source category, designated "steam electric power plants" has been established for purposes of implementing the NPDES program (33 U.S.C. (Supp. III) 1316(a), 10 CFR40) and covers nuclear power facilities.

3. New source performance standards (discharge standards for future point sources) to be established by EPA for nation-wide application, on the basis of the "best available demonstrated control technology" for designated industrial categories and dischargers. 33 U.S.C. (Supp. III) 1316(a) .

"Steam-electric power plants have been so designated. (33 U.S.C. (Supp. III) 1316(b)).

4. Toxic effluent standards for the discharge of "those pollutants which after discharge and upon contact with any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, cancer, genetic mutations physiological malfunctions or physical deformities, in such organisms or their offspring." These are to be established by EPA for nation-wide application (33 U.S.C. (Supp. III) 1317).

Each of the foregoing is subject to prescribed time frames. Further, the FWPCA defines the term "pollutant" to include among other things, "radioactive materials." (33 U.S.C. (Supp. III) 1362(b)). The decision of the Circuit Court of Appeals in this case relates to EPA responsibility for setting discharge standards, and thereby calls for EPA to set both effluent standards for existing point sources (2 above) and new source performance standards (3 above); or alternatively toxic

effluent standards for radioactive materials which would be applied to both existing and new sources.

Radioactive materials of the types discharged in the effluent from power plants readily qualify as "pollutants" under FWPCA, and thereby qualify for discharge regulation by EPA under the various provisions outlined above.

Regulation on the basis of the toxic pollutants section of the FWPCA, for example, could be applied to all radioactive materials. The states would not be able to require higher discharge limitations on toxic, radioactive effluents in light of the finding of federal preemption over power plant radioactive effluent discharges in the Northern States v. Minnesota decision, despite the reallocation of authority to EPA for controlling discharges. The possibility of differing standards among the states with consequent disruption of the national development of nuclear power would thereby be avoided; although each state could eventually qualify for implement-

ation and enforcement of the federal standards, following arrangements with EPA under the FWPCA (33 U.S.C. (Supp. III) 1341); 42 U.S.C. 1857C-5) and the consent of the NRC under the provisions of the Atomic Energy Act. 42 U.S.C. 2021(b).

Other alternatives for EPA in regulating such discharges are provided by the FWPCA. For example, EPA can determine discharge limitations for existing sources in keeping with its findings on "best practicable" control technology (33 U.S.C. (Supp. III), 1314 (b) (1) (B)) for implementation by 1977 and "best available" control technology 33 U.S.C. (Supp. III) 1314(b)(2)(B) for implementation by 1983. EPA can also determine discharge limitations for new sources on the basis of "best available demonstrated control technology." 33 U.S.C. (Supp. III) 1316(a)(1). EPA could in such cases, employ the principle of "As Low As Is Readily Achievable" (10 CFR 50. 34a(a)) and the methods of cost-benefit analysis, used by the NRC, and arrive at discharge limitations similar to those provided in NRC's Appendix I. 40 Fed.

Reg. 19439, (May 5, 1975).

The foregoing analysis also indicates that discharge control by EPA would not necessarily interfere with the principle of federal preemption over the radioactive effluent discharges of nuclear power plants, as such principle has been articulated in the Northern States case. 447 F.2d 1143(C.A.8) aff'd, 405 U.S. 1035 . Discharge control authority would remain with a federal agency, and the issue of federal preemption is therefore not raised by this case. Subsequent to the formulation of EPA discharge limitations and the implementation of such limitations in an EPA program, the federal preemption issue may arise in a controversy, and can be appropriately dealt with at such time.

EPA authority to determine such discharge limitations on nuclear power plant sources is therefore consistent with, and made capable of effective implementation by, the several provisions of the FWPCA, and does not, at this time, raise issues of federal preemption.

CONCLUSION

For the foregoing reasons, the judgment of the court of appeals should be affirmed.

Respectfully submitted.

Michael S. Baram

Michael S Baram

Attorney

September 1975